Water main breaks can occur at any time but the chances of a main break increases during periods of extreme temperatures like winter. Over the past 5 years, Metro Water Services has averaged 450 main breaks a year with most occurring during the winter months. In 2014, crews responded to over 580 breaks, with 168 of them occurring in January. These breaks have the potential to affect water service to hundreds of customers as well as creating hazardous road conditions for motorists. Therefore, Metro Water Services has a Winter Emergency Plan and our staff and equipment are prepared for winter weather and the probable increase in breaks.



Anyone observing water running in the street during a period without rain or experiencing a water outage is asked to contact our 24/7 emergency line at (615) 862-4600.

The faster the leak /break is reported, the faster the sometimes lengthy repair process can begin.

Water Main Repair Process:

- 1. Possible leak/main break is reported to the 24/7 emergency line at (615) 862-4600
- 2. MWS dispatches an investigator to site.
- 3. The investigator verifies if the break is indeed a water main break and determines if it is an emergency or can be scheduled for repair.
- 4. The exact location of the leak is determined using various tools and techniques such as sounding devices.
- 5. MWS dispatch contacts Tennessee One Call regarding intent to excavate and location (State Law requires anyone about to engage in either digging, excavation, moving of earth, demolition or any type of activity that disturbs the earth and therefore possibly involving a danger to damaging underground utility lines, to notify Tennessee One Call, of their intent to dig. MWS may not begin excavating the site until utilities are marked, which can take up to 2 hours.)
- 6. An emergency repair crew, valve crew and heavy equipment are dispatched to site.

- 7. If damage has occurred to the road and or the compromised area must be blocked off, barricades are delivered to the site and the Metro Nashville Police Department is contacted for assistance.
- 8. The valve crew begins to re-route water to minimize service disruptions by closing nearby valves. This process isolates the broken section of main and stops water flow while they make repairs. This valving may result in no service, reduced service and/or discolored water. Discolored water is likely due to flow direction changes within the pipe and should be temporary. Although safe, if discoloration continues for more than a few minutes of running your water at the tap, call our MWS Dispatch office at (615) 862-4600 for further instruction and/or to make a service call. MWS may also post a site message when you call to provide any system status.
- 9. Once other utilities have been marked, excavation can begin. This is most often done with a backhoe but crews are occasionally required to dig by hand to avoid gas or electric lines.
- 10. Once the broken main is excavated, crews must inspect the pipe and assess if the pipe can be repaired or must be replaced and determine necessary parts and resources.
- 11. Crews carry typical repair parts on their trucks but occasionally unique parts or must be acquired. This can take hours or days depending on the specialty of the part.
- 12. Once the main is repaired, the main must be slowly filled with water, disinfected and repressurized. (On rare occasions, the main may leak or break again as water returning to the main causes intense pressure to the system)
- 13. After the main is pressurized and the repair is determined to be complete, a water quality sample is taken and service is restored.

A simple water main break can be completed in six to eight hours, but large or complicated repairs may take several days or even a week. Conditions such as weather and daylight may affect repair times as well. Often emergency repair crews are working overnight and are dealing with harsh conditions such as freezing temperatures, rain and/or snow.

Metro Water Services considers your health and safety in all that we do. We appreciate your patience, understanding and cooperation during any service interruption and be assured that we are working as diligently and safely as possible to restore full service as soon as possible.